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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/686,779	10/17/2003	Tjaart Andries Du Plessis	33692	7739

26817 7590 09/19/2005

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EXAMINER

BERMAN, SUSAN W

ART UNIT	PAPER NUMBER
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1711

DATE MAILED: 09/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/686,779	Applicant(s) DU PLESSIS ET AL.	
	Examiner Susan W. Berman	Art Unit 1711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2005.
 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 12-45 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 1-10, 12-23, 26-32 and 36-40 is/are rejected.
 7) ☒ Claim(s) 24, 25, 33-35 and 41-45 is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☒ None of:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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Response to Amendment

The objection to the Specification is withdrawn.

The objection to claims 14-15 is withdrawn.

The rejection of claims as being anticipated by Berejka (4,332,655) is withdrawn. Berejka teaches adhesive polymers of ethylene preferably having a low melt index, but does not teach the wt. % gel in claim 1 or the high density of claim 26.

The rejection of claims as being anticipated by Chang (5,952,396) is withdrawn. Chang et al do not teach the gel fraction recited in claim 1 or the density recited in claim 26.

The rejection of claims as being anticipated by Lucas et al (5,266,607) is withdrawn. Lucas et al teach irradiation to obtain substantial gelation.

The rejection of claims over Langohr et al (6,500,540) is withdrawn. Langohr et al disclose polyethylene having a density less than 0.89 g/cm³, a melt index less than 50 g/10 min. and gel of greater than or equal to 30 wt. %.

Response to Arguments

Applicant's arguments filed 06/27/2005 have been fully considered. Applicant's arguments with respect to claims rejected in the first Office Action have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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Claims 1, 4, 7-10, 12, 16, 17 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Hyon et al (6,168,626). Hyon et al teach irradiation of ultra-high molecular weight polyethylene with a low dose of high energy to introduce a very small amount of crosslinking points, resulting in slight crosslinking (column 2, lines 47-55). See column 3, lines 21-65, and Examples 1-3. It is believed that the slight crosslinking taught by Hyon et al would result in a gel fraction within the instantly claimed range.

Claims 1-10, 12, 16-20, 26-32 and 36-40 are rejected under 35 U.S.C. 102(b) as being anticipated by Lawton (3,362,897). Lawton discloses a method for irradiating polyethylene followed by heating to render it less crystalline. See column 1, lines 60-65, column 2, lines 13-40, column 3, lines 23-48, column 7, lines 50-55, and Examples 1-6. Lawton does not mention the weight percent gel obtained by the disclosed method. The method disclosed by Lawton would be expected to result in the same properties as are set forth in the instant claims in the absence of persuasive argument or evidence to the contrary.

Claims 1, 4, 5, 7-10, 12-17 and 21-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Kurtz et al (4,525,257). Kurtz et al teach low level irradiation of linear low density ethylene/alpha-olefin copolymers to introduce crosslinks without significant gelation. See column 2, lines 12-29 and lines 47-60, column 3, lines 46-62, column 4, lines 14-65, column 5, line 63, to column 6, line 21, column 7, lines 3-11,

Allowable Subject Matter

Claims 24, 25, 33-35, 41-45 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art cited herein does not teach the limitations set forth in the dependent claims.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan W. Berman whose telephone number is 571 272 1067. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571 272 1078. The fax phone number for the organization where this application or proceeding is assigned is 571 273 8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SB
9/15/05



Susan W Berman
Primary Examiner
Art Unit 1711